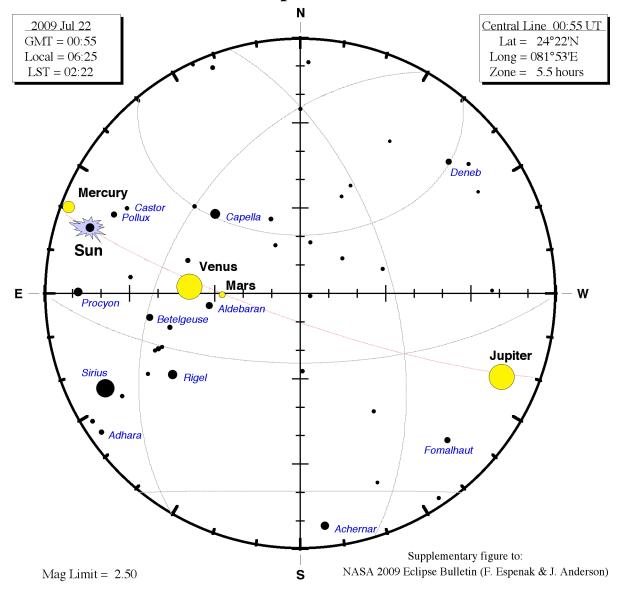
## **Supplementary Figure**

FIGURE 25B - SKY DURING TOTALITY AS SEEN FROM CENTRAL LINE AT 00:55 UT (FOR CENTRAL INDIA)

## **Total Solar Eclipse of 2009 Jul 22**



The sky during totality as seen from the central line in India at 00:55 UT. The brightest planets visible during the total eclipse will be Mercury ( $m_v$ =-1.4) and Venus ( $m_v$ =-3.9) located 9° east and 41° west of the Sun, respectively. Mars ( $m_v$ =+1.1) will be more difficult to spot just west of Venus. Finally, Jupiter ( $m_v$ =-2.8) shines brightly low in the west. Bright stars, which might also be visible, include Procyon ( $m_v$ =+0.38), Sirius ( $m_v$ =-1.44), Betelgeuse ( $m_v$ =+0.5v), Rigel ( $m_v$ =+0.12) and Capella ( $m_v$ =+0.08).

The geocentric ephemeris below [using Bretagnon and Simon, 1986] gives the apparent positions of the naked eye planets during the eclipse. *Delta* is the distance of the planet from Earth (A.U.'s), *App. Mag.* is the apparent visual magnitude of the planet, and *Solar Elong* gives the elongation or angle between the Sun and planet.

Ephemeris:	2009	Jul	22	01:30	UT	Equinox	=	Mean	Date
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Planet	RA	Declination	Delta	App. Mag.		Phase	Solar Elong
					arc-sec		•
Sun	08h06m13s	+20°16'35"	1.01603	-26.7	1889.0	_	_
Moon	08h03m41s	+20°32'23"	0.00239	_	2005.4	_	_
Mercury	08h45m08s	+19°54'46"	1.31901	-1.4	5.1	0.95	9.1E
Venus	05h11m09s	+20°51'31"	1.06004	-3.9	15.7	0.70	40.9W
Mars	04h20m45s	+21°03'01"	1.80846	1.1	5.2	0.91	52.5W
Jupiter	21h50m24s	-14°09'22"	4.11192	-2.8	47.9	1.00	154.4W
Saturn	11h20m17s	+06°27'08"	10.06221	1.1	16.5	1.00	49.0E